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(71) Applicant: TOSHIBA-EMI LIMITED  
Tokyo 107 (JP)

(72) Inventors:

- Yamaguchi, Toshitsugu c/o Toshiba-Emi Limited  
Minato-ku Tokyo 107 (JP)

- Takagishi, Ryouju c/o Toshiba-Emi Limited  
Minato-ku Tokyo 107 (JP)
- Nakabayashi, Akihito c/o Toshiba-Emi Limited  
Minato-ku Tokyo 107 (JP)
- Shimoi, Yoshiyuki c/o Toshiba-Emi Limited  
Minato-ku Tokyo 107 (JP)

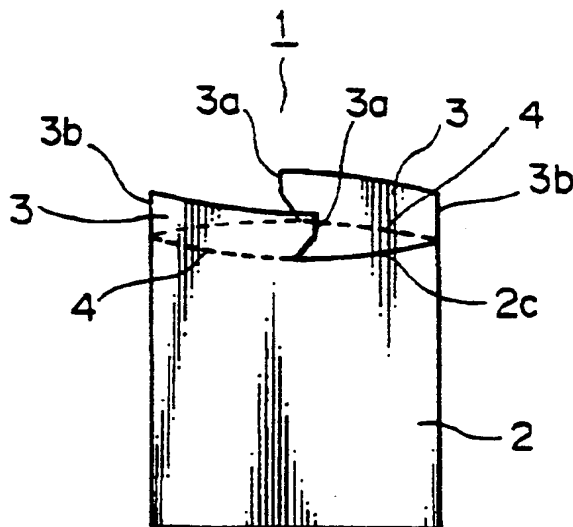
(74) Representative: Reinhard - Skuhra - Weise &  
Partner  
D-80750 München (DE)

## (54) Disk case

(57) A disk case has a sack-shaped case body for accommodating a disk. Tongue pieces are provided at one sides of the centers of both halves of the periphery of a disk insertion inlet of the case body. These tongue pieces are so formed that their one ends are aligned with each other at a position of the end of the disk insertion inlet of the case body and cross on the outside of the periphery. The other ends of the tongue pieces coincide

with both sides of the case body, respectively. At the boundary between each of the tongue pieces and the case body, a perforation is formed. At the perforation, the tongue pieces can be separated from the case body. Thus, the disk case can be obtained which has a simple structure, permits the case to be easily sealed and appended to book and prevents a disk from moving in the case after sealing.

FIG. 1



EP 0 693 442 A2

## Description

### BACKGROUND OF THE INVENTION

#### Field of the Invention

The present invention relates to a disk case, and more particularly to a disk case for accommodating a disk appended to a book or the like.

#### Description of the Prior Art

Conventionally, a disk appended to a book as an appendix has been accommodated in the disk case. The disk case has a sack-shaped case body for accommodating a disk. The disk case is provided with a tongue piece for sealing at a disk insertion inlet and another tongue piece to be appended to the book at a side adjacent to the disk insertion inlet.

After the disk is accommodated in the disk case, the one tongue piece for sealing is starched and bent to seal the case. After sealing, another tongue piece is pasted onto the book. Thus, the disk is appended to the book.

The above disk case, however, the following defects. It has difficulty of working the case because of its complicated structure. The disk insertion inlet, after starching and sealing, must be appended to the book, which is accompanied by poor workability. When the disk insertion inlet is sealed by starching, paste may be applied to the disk. Further, after sealing, the disk may move in the case so that it is damaged.

### SUMMARY OF THE INVENTION

An object of the present invention is to provide a disk case which has a simple structure, permits the case to be easily sealed and appended to book and prevents a disk from moving in the case after sealing.

In accordance with one aspect of the present invention, there is provided a disk case including a sack-shaped disk case body for accommodating a disk and tongue pieces formed in the periphery of a disk insertion inlet of the case, in which the tongue pieces are so formed that their one ends coincide with other at a position of the end of the disk insertion inlet of the case body and cross on the outside of the periphery.

In accordance with another aspect of the present invention, perforations for cutting the case body off the tongues are formed at the boundary of the case body and the tongue pieces, or otherwise the perforations for cutting part of the tongues are formed in or at the mid-points of the tongues.

In order that the case body can be easily cut off, incisions may be formed at both ends of the boundary between the case body and the tongue pieces or both ends of the tongues where perforations are formed.

In order that the disk can be surely accommodated, the case body and the tongue pieces are preferably made of resilient material.

In accommodating a disk in the disk case, the case body is opened and then the disk is accommodated in the case body. The tongue pieces formed in the periphery of a disk insertion inlet of the case body are bent in crossing directions so that their ends cross to overlap.

Since the entire disk case is made of resilient material, when the ends of the tongues are caused to cross, the disk is accommodated in the sack-shaped case in a state that it is pressed. The disk is difficult to move within the case.

The disk can be appended to a book in such a manner that the entity or part of the tongues is pasted on the book by hot melt or the like.

The disk can be taken out from the book in such a manner that with part of the tongue pieces pressed by fingers, the case body is cut off at the perforations.

In this case, incisions at both ends of the perforations permit the case body to be easily separated.

In accordance with the present invention, the disk case according to the present invention has a simple structure, permits the case to be easily sealed and appended to book and prevents a disk from moving in the case after sealing.

The above and other objects and features of present invention will be more apparent taken in conjunction with the accompanying drawings.

### BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a view showing a first embodiment of a disk case according to the present invention;

Fig. 2 is a development view of the disk case according to the first embodiment;

Fig. 3 is a view showing the manner that a disk is accommodated in the disk case according to the first embodiment of the present invention;

Fig. 4 is a view showing the manner that the disk case according to the present invention is pasted onto a book or the like;

Fig. 5 is a view showing a second embodiment of a disk case according to the present invention;

Fig. 6 is a development view of the disk case according to the second embodiment;

Fig. 7 is a view showing the manner that a disk is accommodated in the disk case according to the second embodiment of the present invention;

Fig. 8 is a view showing the third embodiment of a disk case according to the present invention;

Fig. 9 is a view showing a modification of the third embodiment; and

Fig. 10 is a view showing a perforation with incisions formed at both ends.

### DESCRIPTION OF THE PREFERRED EMBODIMENTS

Now referring to the drawings, an explanation will be given of embodiments of the present invention.

## Embodiment 1

Fig. 1 shows the first embodiment of a disk case according to the present invention. A disk case 1 has a sack-shaped case body 2 for accommodating a disk. Tongue pieces 3, 3 are provided at one and other sides of the centers of halves of the periphery 2c of a disk insertion inlet of the case 2.

These tongue pieces 3, 3 are so formed that their one ends coincide with other at a position of the periphery 2c of the disk insertion inlet of the case body 2 and cross on the outside (upper side of the drawing) of the periphery. The other ends of the tongue pieces 3 and 3' coincide with both sides of the case body 2, respectively. At the boundary between each of the tongue pieces 3, 3 and the case 2, perforations 4, 4 are formed. At the perforation 4, 4, the tongue pieces 3, 3 can be separated from the case 2.

Fig. 2 is a development view of the disk case 1. The case body 2 includes a front sheet 2a, a back sheet 2b and overlap widths 2d, 2d on both sides of the front sheet 2a. The front face and back face are for convenience of use and hence changeable.

The disk case can be assembled as follows. First, the overlap widths 2d, 2d are bent and paste is applied on their faces. Next, the back sheet 2b is bent at the boundary between it and the front sheet 2a and applied to the overlap widths 2d, 2d, thus completing the disk case 1.

The disk case 1 is made of resilient paper material. So, it can be so designed that even when the disk insert inlet is opened by pressing force from both ends, it is closed when pressing is ceased.

As shown in Fig. 3, therefore, the case body 2 is pressed by fingers from both sides of the case body 2 to open the disk insertion inlet and then a disk 100 is accommodated in the case body 2. Force is applied to the tongues 3, 3 in directions of arrows so that the ends of the tongues are caused to cross. Thus, the disk 100 is accommodated in the sack-shaped case body 2 in a state that it is pressed from both sheets. The disk is difficult to move within the case 1.

The disk 100 accommodated in the disk case 1 can be appended to a book or the like in such a manner that as shown in Fig. 4, bonding agent such as hot melt is applied to shaded portions of the tongue pieces 3, 3, and the case 1 is pasted on a predetermined portion of the book.

The disk 100 appended to the book can be taken out in such a manner that with the tongue pieces 3, 3 pressed by fingers, a part of the case 2 is separated from the perforation 4.

In this way, the disk case 1 according to this embodiment can be easily worked, sealed and appended to the book. The tongue pieces 3, 3 have only to cross to prevent the disk from dropping. Further, since the disk 100 will not move within the case 1, it will not be damaged. Thus, its quality can be assured.

## Embodiment 2

An explanation will be given of the second embodiment of a disk case 11 according to the present invention. Like reference parts in the second embodiment refer to like parts in the first embodiment.

Fig. 5 shows the second embodiment of a disk case according to the present invention. The disk case according to the second embodiment is different from that according to the first embodiment in that tongue pieces 3' and 3' are also formed at the other sides which are opposite to the one and other sides of the centers of both halves of the periphery of the disk insertion inlet of the case body 2 of the disk case 11 where the tongue pieces 3 and 3 are formed.

Fig. 6 is a development view of the disk case 11. The disk case 11 can be assembled in the same manner as in the first embodiment.

Further, the disk 100 can be accommodated in the case 11 in the same manner as in the first embodiment as shown in Fig. 7.

As described above, the disk case 11 according to the second embodiment is different from the disk case 1 in that the tongue pieces 3', 3' are formed oppositely to the tongue pieces 3, 3. The disk case 1 according to the first embodiment, therefore, can be considered to be in the state where the tongues 3', 3' have been cut off the disk case 1 according to the first embodiment. This means that one step can be reduced from the process of making the disk case 11 according to the first embodiment.

## Embodiment 3

An explanation will be given of the third embodiment of a disk case 21 according to the present invention. Like reference parts in the third embodiment refer to like parts in the first embodiment.

Fig. 8 shows the third embodiment of the present invention. The disk case according to the second embodiment is different from that according to the first embodiment in that perforations 4, 4 are formed in or at midpoints of the tongue pieces 3 and 3 formed on the one and other sides of the centers of halves of the periphery 2c of the disk insertion inlet of the case body 2 of disk case 21.

In such a structure, if part of the tongue pieces 3 and 3 are pasted as shown in Fig. 4, when the disk 100 is taken out, the disk case is separated at the perforations 4 and 4. Therefore, after separation, the case 2 can be closed by crossing the ends of the tongue pieces 3, 3.

A disk case 31 according to a modification of the third embodiment is shown in Fig. 9. Specifically, at the center of the periphery 2c of the disk insertion inlet for the front sheet 2a, a square 13' is formed, whereas on both sides of the periphery 2c of the disk insertion inlet for the back sheet 2b, tongue pieces 13 and 13 coincide with the tongue piece 13' at the periphery of the disk insertion inlet and cross it on the outside of the periphery.

In this case also, the perforations 4, 4 may be formed at the midpoints of the tongue pieces 13, 13. The tongue piece 13' has a height at the perforations of the tongue pieces 13, 13. In this way, the disk case 31 can be easily cut off the book.

Further, as shown in Fig. 10, incisions 5 may be formed at the ends of the tongue piece 13 where both ends of the perforation 4 are located or both ends of the boundary between the case body 2 and the tongue pieces 3, 3.

The incisions 5 permit the disk case to be further easily cut off the book.

#### Claims

1. A disk case including a sack-shaped disk case body for accommodating a disk and tongue pieces formed in the periphery of a disk insertion inlet of the case body, in which said tongue piece are so formed that their one ends coincide with other at a position of the periphery of the disk insertion inlet of the case body and cross on the outside of the periphery.
2. A disk case according to claim 1, wherein a perforation is located between said case body and each of said tongues, said perforation being used to separate said case body from said tongues.
3. A disk case according to claim 1, wherein a perforation is located in each of said tongues, said perforation being used to separate a part of each of said tongues.
4. A disk case according to claim 1, wherein said case body and said tongues are made of resilient material.
5. A disk case according to claim 2, wherein incisions are formed at both ends of the boundary between said case body and each of said perforations, or at both ends of each of said tongues.
6. A disk case according to claim 2, wherein said case body and said tongues are made of resilient material.
7. A disk case according to claim 3, wherein incisions are formed at both ends of the boundary between said case body and each of said perforations, or at both ends of each of said tongues.
8. A disk case according to claim 3, wherein said case body and said tongues are made of resilient material.
9. A disk case according to claim 4, wherein said case body and said tongues are made of resilient material.

10. A disk case according to claim 5, wherein said case body and said tongues are made of resilient material.

11. A disk case comprising:
  - a sack-shaped disk case body composed of a first sheet and a second sheet and having a disk insertion inlet at its one end;
  - a first tongue piece formed integrally to said first sheet on the one side of a center of said end of said disk case body;
  - a second tongue piece formed integrally to said second sheet on the other side of the center of said end of said disk case body;
  - one ends of said first tongue piece and said second tongue piece located at the center of said end of said disk case body being aligned in the periphery of said disk insertion inlet and crossing on the outside of the periphery, and the other ends of said first and second tongue pieces being coincident with both ends of said disk case body.

12. A disk case according to claim 11, further comprising:

- a third tongue piece formed on the other side of the center of the end of said disk case body, being opposite to said first tongue piece; and

- a fourth tongue piece formed on the one side of the center of the end of said disk case body, being opposite to said second tongue piece.

13. A method of accommodating a disk in the disk case defined in claim 11, comprising the steps of:

- pressing the case body by fingers from both sides of the case body to open the disk insertion inlet;

- inserting a disk in the case body; and

- crossing the ends of the first and second tongues at the center of the end of the case body by fingers.

14. A method of appending the disk case defined in claim 11 to a book, comprising the steps of:

- applying bonding agent on a part of said first and second tongue pieces; and

- pasting said case on a predetermined portion of the book.

15. A method of taking out a disk from the disk case defined in claim 11, comprising:

- with said first and second tongue pieces pressed by fingers, separating said disk body from said first and second tongue pieces;

- pressing the case body by fingers from both sides of the case body to open the disk insertion inlet;

- taking out the disk from the case body.

FIG. 1

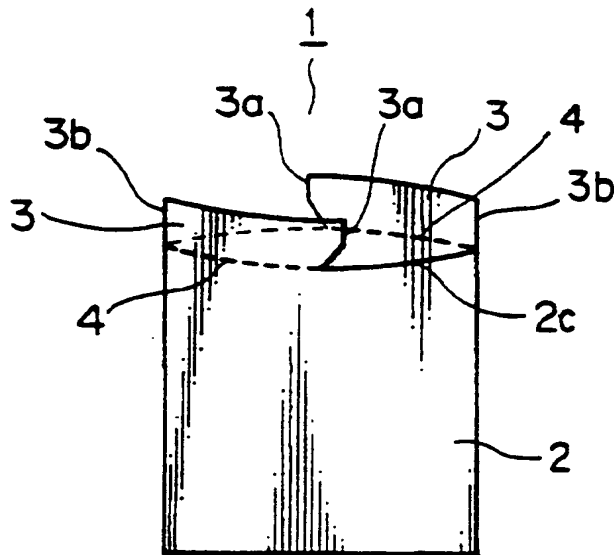


FIG. 3

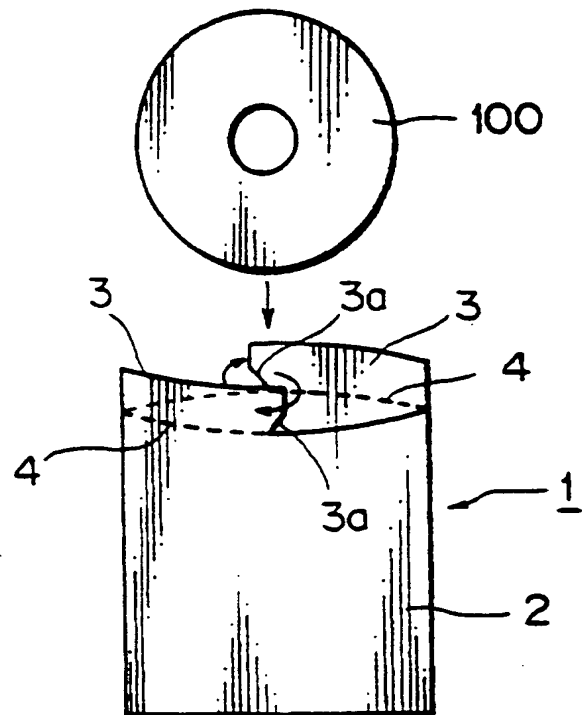


FIG. 2

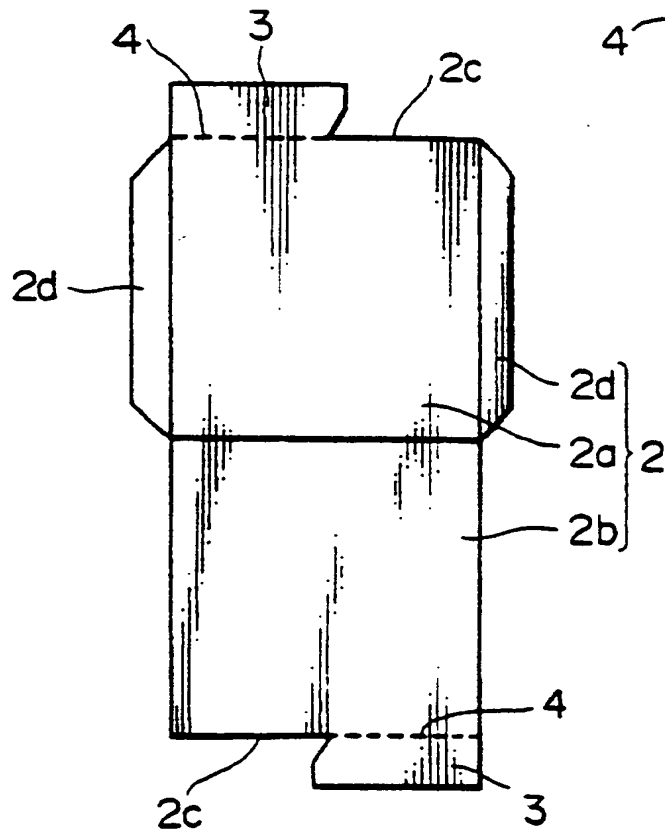


FIG. 4

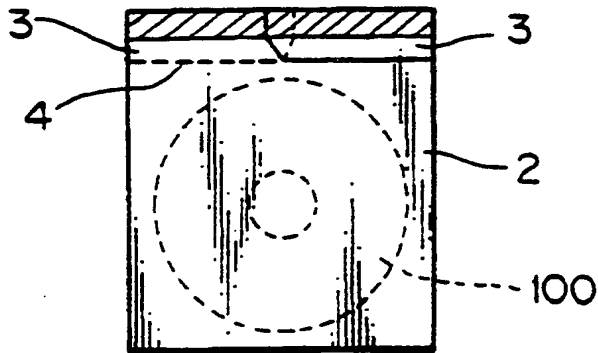


FIG. 5

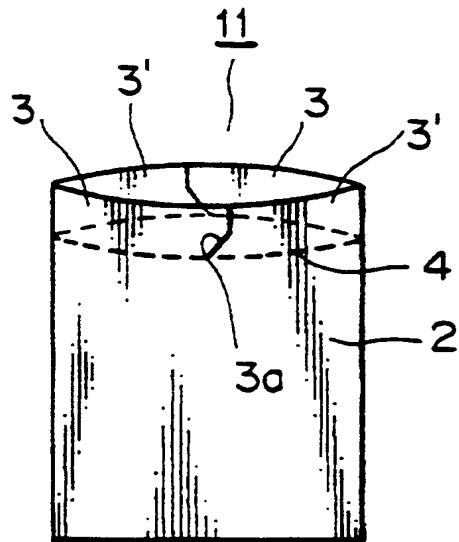


FIG. 8

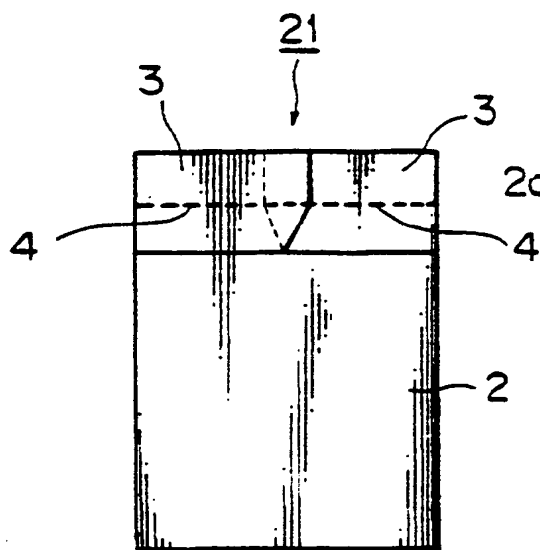


FIG. 6

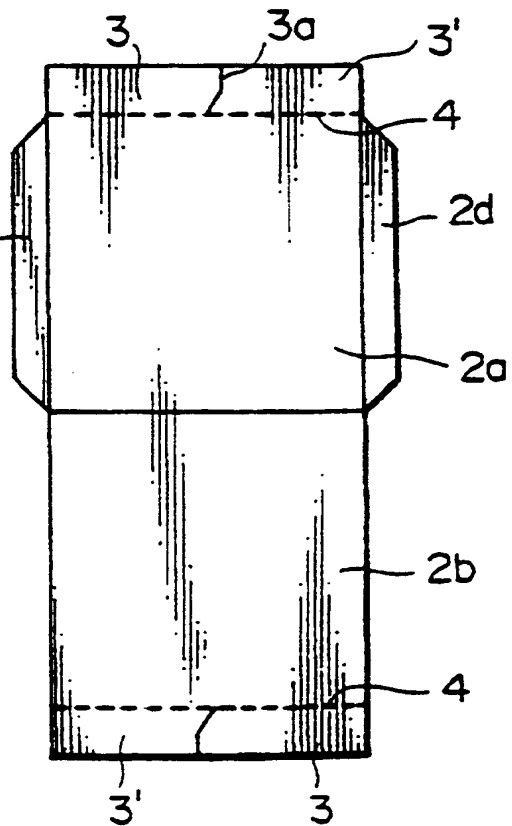


FIG. 7

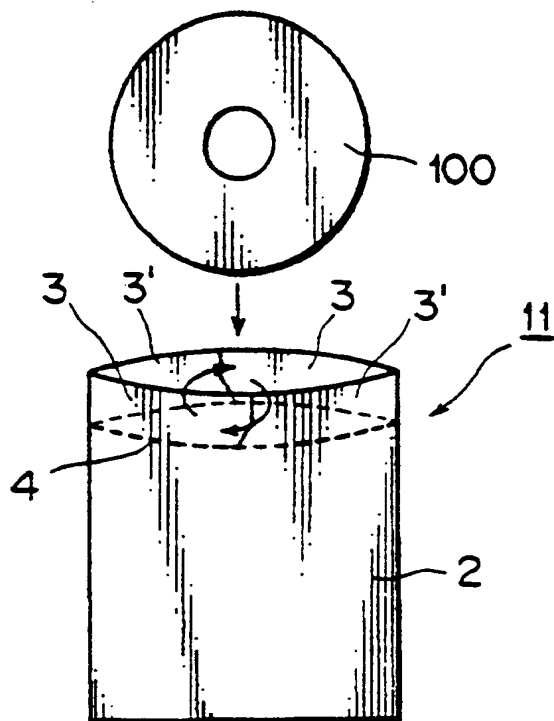


FIG. 9

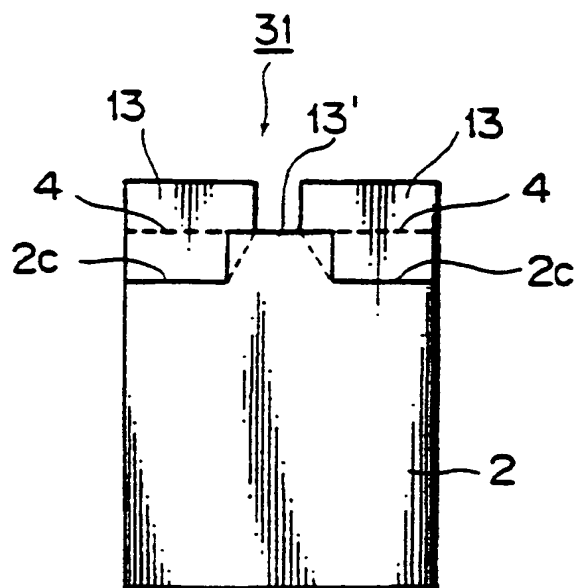
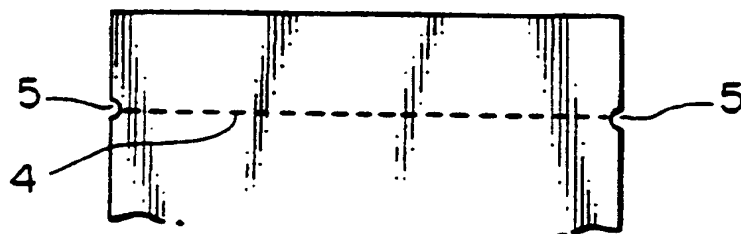
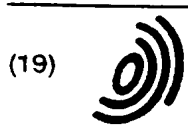


FIG. 10





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(71) Applicant: TOSHIBA-EMI LIMITED  
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Minato-ku Tokyo 107 (JP)

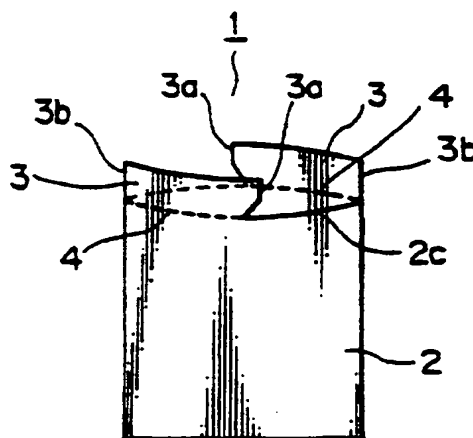
- Takagishi, Ryouju c/o Toshiba-Emi Limited  
Minato-ku Tokyo 107 (JP)
- Nakabayashi, Akihito c/o Toshiba-Emi Limited  
Minato-ku Tokyo 107 (JP)
- Shimoi, Yoshiyuki c/o Toshiba-Emi Limited  
Minato-ku Tokyo 107 (JP)

(74) Representative: Reinhard - Skuhra - Weise &  
Partner  
Postfach 44 01 51  
80750 München (DE)

**(54) Disk case**

(57) A disk case has a sack-shaped case body (2) for accommodating a disk. Tongue pieces (3,3) are provided at one side of the centers of both halves of the periphery of a disk insertion inlet of the case body. These tongue pieces are so formed that their one ends are aligned with each other at a position of the end of the disk insertion inlet of the case body and cross on the outside of the periphery. The other ends of the tongue pieces coincide with both sides of the case body, respectively. At the boundary between each of the tongue pieces and the case body, a perforation (4) is formed. At the perforation, the tongue pieces can be separated from the case body. Thus, the disk case can be obtained which has a simple structure, permits the case to be easily sealed and appended to book and prevents a disk from moving in the case after sealing.

**FIG. 1**



**EP 0 693 442 A3**





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# EUROPEAN SEARCH REPORT

Application Number  
EP 95 11 1266

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claims	CLASSIFICATION OF THE APPLICATION (Int. CL. 6)
A	GB-A-2 147 262 (TINSLEY ROBOR GROUP PUBLIC LIM) 9 May 1985 * the whole document *	1,11	B65D85/57 G11B23/03
A	FR-A-1 282 420 (N.V. PHILLIPS GLOEILAMPENFABRIKEN) * page 2, left-hand column, last paragraph - right-hand column, paragraph 4; figure 3 *	1,11	
A	US-A-5 248 032 (SHEU DAPHNE ET AL) 28 September 1993 * column 3, line 41 - column 4, line 36; figure 1 *	1,11	
A	GB-A-393 384 (MEATCHEM) * page 2, line 87 - page 3, line 40; figures *	1,11	
			TECHNICAL FIELDS SEARCHED (Int. CL. 6)
			B65D B65B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21 June 1996	Examiner Olsson, B
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons -A : member of the same patent family, corresponding document</p>			

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